/452 cont./

505 will venture to cross a quiet bay with an overload that they would never take out into an open channel. The question as to how many persons can be accommodated in a canoe cannot be answered in a single word; at any rate, there is enough room for the parents and the unmarried children of a family, a total of about six or seven (142); Dabbene (b):180 speaks of "up to eight

142. According to Hyades (q):304 it includes "as an ordinary load, seven persons, three of whom are children, one of these being carried on the back or held at the breast of its mother" /translated from French/.

or ten persons" /translated from Spanish/. They step into the divisions formed by the crosspieces. Here, without exception, they squat in the bottom of the canoe and remain quiet in their crouched position, all but the woman who must paddle. Anyone who stands up risks upsetting the unsteady balance. The children sit deep down in the center section and sometimes their eyes do not reach even to the level of the gunwale. Thus, they add a great deal to the stability of the vessel. The man's place is at the bow, the rear third belongs to the woman. The weight of at least two adults is necessary when the sea is turbulent; actual ballast is unknown.

502 We have repeatedly mentioned that the bark canoe of our Yamana, because of its light construction and unsubstantial load, maintains an unstable equilibrium on the water. For this very reason each of the occupants avoids gross body movements, and actual rowing is out of place here. The Indians possess a large measure of self-control, even the children can remain for hours almost motionless in one spot, to prevent the vessel from rocking. L'Hermite was reminded of "Venetian gondolas" (p. 53 /untranslated/) when he saw the bark canoes in Nassau Gulf, and the beautiful comparison Goicueta used for the vessel of the Halakwulup also applies to /453/ that of our Fuegians. On the surface of the water it really does look "like a four-day moon, with the elevated points" /translated from Spanish/, gliding by motionlessly.

/453 cont./

501 Every additional person stepping in changes the unstable balance of the entire vessel considerably. If, meanwhile, a painful feeling of uncertainty comes over the occupant, he will find this repeatedly accentuated in alternately stronger and weaker fashion throughout the trip, either because of a slight change in the current, a larger or smaller succession of waves, or, finally, because of gusts of wind for which the projecting canoe offers an extensive target area.

502 Every woman is amazingly skilled at paddling. She succeeds in preventing the vessel from bouncing jerkily with every stroke of the paddle and in making the slight zigzag line of the course less noticeable. Nevertheless, a person in the boat soon feels this movement. The longer it continues, the more it affects the general feeling of a European; uneasiness overtakes him, and in this situation of increasing uncertainty he longs for the moment when he can set foot on terra firma once again. No matter how often I told myself that my Indian companions were utterly reliable, every trip in a bark canoe was for me anything but soothing. The longer it lasted, the more sensitive I became to the slightest /454/ fluctuation in the equilibrium, and in the end I was nervously irritated. Our Indians, however, have long since become accustomed to these feelings; it is not that they have become insensitive to them, but with it all, their consciousness of safety and their long-tested reckless courage triumphs.

512 731 Out of this some of them develop a certain blind confidence, together with an overestimation of their ability and their judgment of existing weather conditions. Thus, many a canoe capsizes, chiefly, however, because of the incalculable tricks of the weather in that region. Not at all infrequently a family is seized by a whirlwind in the middle of a wide stretch of water or is threatened by breakers that no one could anticipate; since the canoe moves slowly, all human effort is overcome by the superiority of natural forces (145). Many a casualty is remembered

145. We repeat here a sad incident related by Hyades (q):353: "A large number of Fuegians wanted to cross a bay in two canoes in order to look for fungi on the opposite shore; the overloaded canoes foundered, the sea being bad, and

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/454 cont./
only two persons were saved" /translated from French/.

to this day by the Yamana; the reports of missionaries and European travelers also refer to them. In Hyades (q):352 we read: "Shipwrecks of canoes are very frequent and annually cause a high mortality. Mr. Bridges in his unpublished work cites many accidents of this kind: shipwreck of five canoes, 33 persons drowned; shipwreck of two canoes, 13 drowned..." /translated from French/. The accident is usually caused by overconfidence. These people are extremely reckless and, as Bridges (i):15 expresses it "venturesome in trusting themselves with comparative strangeness" /cited in English/, which every observer verifies. In most recent times, however, unprincipled thoughtlessness [273] destroys many a life when Indians in a highly intoxicated state venture out on the treacherous waves although they do not have control of themselves.

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Supremely confident of their own ability, these people may even decide to take long journeys in their fragile vessel. As a rule, however, they stay within the narrow confines of their native district; every dialect group has one (p. 199 /untranslated/). Certain occasions, however, almost always the chase after the large ursine seal, tēpē'a (Arctocephalus australis), and the pursuit of a sick, weary whale, make them forget, in their eagerness, how far behind they have left the coast. It has been proved that a few families visited Isla Ildefonso; others are supposed to have ventured as far as the Diego Ramírez Islands. They are [823] guided in their journeys by their exact knowledge of the locality and by an excellent gift of orientation.

[197] Soon after the opening of the mission station in Ushuaia individual canoes arrived from great distances, even some from the Halakwulup. For example, Bridges (i):15 mentions incidentally: "I know several natives of Cuchawulaf who come to Ushuaia in the East and in the opposite direction as far as Port Gallant and Mercury Sound; this distance is considerably over two /455/ hundred miles" /cited in English/. Our Fuegians can accomplish these astonishingly distant journeys because, wherever they land, they provide for their needs in life, namely, meat from the most diverse types of animals, wood for the indispensable fire, and pieces of fur to protect their bodies.

/455 cont./

396 one man or another will build a canoe. If he has observed that the vessel he built only the previous spring will hardly last out the winter, he sets about early enough, that is, in the fall, to make a new one. He does not take great pains with it, since the bark is not as good in the fall and in any case he will commence a new and better one in the spring. This is the only explanation for Bridges' assertion (i):23 that "the canoes are made twice a year in the spring and autumn. The former are called hákua, the latter Een-ánan [better kísajánan] i.e. Winter Canoe. The natives are specially careful to make the latter well" /cited in English/. Spring is actually the time when the great majority of families make a new vessel (p. 115).

504 /456/ Through the years every man acquires some skill in this work, but this fact alone does not prevent him from treating his canoe most carefully and giving it his utmost attention. If he should lose it in the course of the year, he and his family would be in serious difficulty, sometimes in danger of starving. Heavy blows against rocks and tree trunks are particularly damaging because the bark sections break or tear. Rubbing against pebbles and sand soon causes the bottom and the threads of the seam to be scraped through. For this reason, the vessel is often kept in the open channel after the family has been brought to shore by the woman. Wherever the gently sloping beach permits, they make a sort of toboggan slide of damp Macrocystis algae over which they drag the canoe and upon which it rests. When boarding the canoe, everyone places his foot very carefully; in fact, everyone avoids any jolt and violent movement, for the seams easily burst and the seam threads become more brittle the older they are. In loading and unloading large objects are handled gently and cautiously.

422 462 Even though the man makes the canoe almost entirely by himself, it is not regarded as his property; the woman uses it and takes care of it. The man gives it to her, and it actually belongs to her or to the entire family. All the duties during the trip, as well as before and after, are her responsibility. She

462 502 alone paddles. Squatting in the rear third of the vessel, close against the right side, she grasps the oar shaft with both hands, the left above the right, and pushes the oar diagonally backwards

/456 cont./

with a slight S-shaped movement in the water. This propels the canoe forward and gives it a definite direction at the same time. Paddling is made more difficult because the woman cannot brace her feet against anything and because she does not have a special seat. Also, she does not support her arms against the gunwale, but holds them entirely free. This is one explanation for the unusually powerful development of the upper part of her body (p. 219 /untranslated/). As a rule she alone paddles (148).

148. Hence it is an exaggeration when Hyades (q):352 maintains that "the canoe is usually propelled with two paddles, each of which is manipulated by a woman in the large center section" /translated from French/.

If she needs help in a rough sea or when speed is required, she asks another woman or her grown daughter to take an oar. The other woman then paddles on the left side of the boat. Through daily practice, every woman learns to handle an oar skillfully. BD:32 uses the word ategaatas, "clever in paddling" /cited in English/. She also decides how the cargo is to be loaded or unloaded and distributed, what seat each child is to have, and who is to bail out the water and tend the fire.

If we consider everything that falls to her in the way of privileges and duties, she seems to be the sole ruler of the canoe. Her husband would not presume to compete for this privileged position of hers on the water nor tell her what to do. On shore the two agree on the course of the trip, /457/ and en route the husband expresses his particular wishes if game should approach, but the piloting and servicing of the vessel is entirely in her hands. If it should be necessary, she even requests him to leave his place at the bow and to sit near her and help her with the paddling. Every vessel has at least two paddles. She helps to make repairs, except in the case of larger tasks, such as putting in a side section, which are the responsibility of the man. Her constant duty is to renew the calking, for in the continual dampness, moss and grass, rushes, and algae rot quickly.

/460 cont./

501 abandoned this new invention. Today we run across an occasional dugout used for short trips; a new one has not been made for three decades.

501 126 On my second trip I brought back to the museum in Santiago (Gusinde [b]:145) a dugout that had for years lain in the woods untouched near the mouth of the Rio Douglas. As Lothrop (b):146 says: "the last double-ended dugout afloat was purchased and is now in the Museum [of the American Indian in New York]. When purchased it had been in the water many years and was unbelievably heavy" /cited in English/. In short, anyone who owns a dugout, like old Pedro, uses it as long as it is still serviceable; middle aged men have long since adopted the skiff. In a period of about 40 years the dugout came into use among the Yamana and disappeared again (155).

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155. In this connection Spencer:88 says briefly: "Bark canoe precedes dug-out, which has now and for some years past entirely replaced bark" /cited in English/.

396 [439 177] 2. The Flat Skiff. Since the sawmills were started on Beagle Channel by Europeans, the natives can easily obtain good boards of different thicknesses. They are also given nails and iron strips. If they cannot buy their own tools, they borrow them everywhere. They do not lack the skill to make a low, short skiff. It must be wide because it is short and low. They curve the gunwale and produce a noticeably elevated bow with a sharp keel that slants backward. This makeshift (156) has /461/ no advan-

156. Lothrop (b):146 gives a short description and an illustration of it.

tages over a European construction, except for the tin can that is placed in the center for the fire. In the forward part they nail a narrow wooden crosspiece with a small hole in the middle. Into this is placed a short mast. If a light breeze comes up from the 502 rear, they hoist a piece of sacking, remnants of a woman's skirt,

/461 cont./

502 or some other rag as a sail on the yard, the end of which is tied to the edge of the boat by means of two or three thin ropes. Sometimes they are satisfied to stretch the rag between two strips of wood and hold it up high until their arms become tired (157).

157. Wieghardt:31 writes: "Some kind of rag or a seal skin is hoisted as a sail, sewed with rush fibers to a small yard supported by a mast held in one of the crosspieces" /translated from Spanish/. Compare Martial:190. Formerly the Yamana did not know of this expedient, for, as Webster:I,184 maintains, "they never make use of a sail" /cited in English/.

501 177 This flat skiff no longer reveals anything of native art. It is only through Europeans that the last survivors of the Yamana people have been able to put together the skiff described here, which, compared to their original bark canoe, has many advantages. It permits them to use a sail, sétel, of some kind, which the light construction of the bark canoe would not permit. With this new vessel they also adopted the long oars which are not suitable for paddling because of their shape.

501 178 All the available historical sources, beginning with the first writings of the Dutch admiral L'Hermite, confirm, without exception, that the bark canoe was the only method of transportation of the Yamana until the last decades, and that it was always put together in exactly the same way (158). Its advantages and its

158. Cooper:197 likewise came to the conclusion that "throughout the whole territory, the bark canoes were constructed in the same way of three or more pieces sewed together, with thwarts and rips and with pointed ends" /cited in English/. Lovisato (a):199 regards the bark canoe as "the most ingenious work by these poor people of Fuegia, which, however, from Drake to us, for 300 years then, has remained the same" /translated from Italian/.

efficiency have been described in detail above. Every careful observer will admit that neither the dugout nor the flat skiff compare with the bark canoe in technical construction and suitable form.

/613 cont./
181 will regard his hunting effort as completely hopeless, but not infrequently that is just the time when his booty is more than abundant. Complete satisfaction grows out of the success of which the Indian is confident from the start, and this further increases his reliance on his own ability.

182 Naturally, the drive toward restless wandering coincides abstractly with his adopted form of economic management. In Tierra del Fuego agriculture and animal husbandry in a form which our natives would be obliged to choose would be simply impossible. They have no choice but to gather and hunt what nature offers them voluntarily. Now, game animals are driven away from the spot where one of them has been killed. Similarly, it is advisable for a woman to change the place of her gathering activity as soon as possible. Thus, as a matter of principle, a family remains in one place only as long as the meat from one of the larger /614/ animals lasts. If the family is dependent solely upon mussels, they set out even sooner. They do not stay more than an average of two or three days in the same place. Advantageously, the Yamana travel in very small groups, usually as individual families, sometimes with a second or third family. They separate again after a short distance, because personal safety, of which everyone is conscious, drives them toward complete independence and unrestricted freedom.

2. Underway in the Canoe

462 The only and indispensable means of transportation of our
● 502 Indians is their bark canoe. Since it is lightly constructed, the woman is not excessively burdened by paddling. The canoe belongs to her. Although the man must build it, the care of it is left to her alone (415). She takes this very seriously, for the

415. Bridges (MM:III, 115;1869) writes: "Canoes are always under the charge of the women, who paddle them from place to place, and spend much of their time in them" /cited in English/, namely, on the unavoidable trips.

/614 cont./

462 loss of the canoe endangers the life of the whole family. She
502 repairs damage as soon as possible (416), or, if there is major

> 416. "It is chiefly the task of the woman to keep the canoe, this article which is absolutely indispensable for the existence of the Fuegian, in repair, and we always see her busy calking the cracks with half-rotten twigs and sewing together the individual pieces" (Hyades [g]:38).

work to be done, asks her husband to do it. Throughout the entire trip she alone attends the canoe; however, if there is a heavy sea, she requests her husband or other occupants to assist. She keeps the boys tending the fire and delegates to the girls the task of bailing out the water that seeps in. After landing, when the dogs have leaped out, when her husband and the children have disembarked, and all their belongings have been brought to shore, she must finally moor the vessel. Bridges (MM:III, 115; 1869) expresses very definitely what the bark canoe means for the Fuegian family: "The canoe is the most valuable property an Indian possesses, by it he travels from place to place, and with its assistance he obtains the chief part of his food...Canoes are used daily" /cited in English/.

502 On the trip itself every member of the family has his particular seat. The man squats in the bow; his spear and harpoon lie beside him and protrude far beyond the bow, easy to grasp and handy, with the bone point forward (p. 128). The children are distributed in the lower center part around the fire and between the low, small piles of wood. The woman occupies the entire stern by herself and paddles, first on one side, then on the other, usually on her right side. She grasps the single paddle with both hands and moves it in the water, not with a stroke, but with more of a stirring and short pushing motion. She lifts it diagonally out of the water and /615/ lowers it almost perpendicularly into the water when she prepares for the next stroke. This peculiar manipulation of the paddle is simultaneously rowing and steering (417).

> 417. Paddling has to be learned. Then it is,

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as Hyades (g):38 correctly judges, "work that is not too hard, since the canoes, made exclusively out of the bark of the birch-leaved beech, are marvelously light."

This work is a great strain on the entire upper part of the body, for the legs are neither braced nor do they offer support, and the arms do not rest on the rim of the canoe, yet bear the entire strain of free paddling (418). In the vessel all the occupants must squat

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418. Hence the slight development of the legs in contrast to the sturdy torso of the healthy, active women (p. 219 /untranslated/).

close together deep in the bottom, with their legs tucked under. Its center of gravity is very high, even when it is loaded to capacity, and it would easily tip over if the balance were disturbed. Children are told that they should bend their heads and the upper part of their bodies low; usually they lift themselves only high enough for their eyes to reach the level of the gunwale (419).

419. The words of Lovisato (b):134 are to a certain extent correct: "In this canoe the Fuegians remain in such a position that only their heads may be seen, a position identical with the one they maintain in the wigwam" /translated from Italian/.

502 225 462 Before the family leaves the shore, man and wife have agreed on the goal of the journey or the course. She now steers toward this while he constantly is on the lookout for game. If an animal comes into view, he tells his wife and reaches for his spear or harpoon (420). As the vessel nears the animal, he slowly stands

420. The division of labor within the family is thus clearly expressed. Aspinall:270 refers to this: "Each canoe holds one family; the

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/615 cont./ women row and the man is on the look-out with raised javelin."

up and, at the appropriate moment, throws his weapon. Only the perfectly synchronized co-operation of both of them assures the success of the hunt, and every married couple achieves absolute perfection in this in the course of the years. When they pursue a wounded animal, the woman must occasionally exercise extraordinary strength. She is equipped for it by the habit of almost daily paddling.

502 If the family has been rewarded with unexpected luck in the hunt or if they are very tired from the pursuit of an animal, they sometimes suddenly decide to land at the nearest good place. The most suitable site is a flat, gently sloping beach, covered with coarse pebbles, in a calm inlet. The woman does not let the canoe run aground, since all friction is to be avoided. She holds the bow steady at right angles to the shore while the inmates disembark one after the other (421) and /616/ toss all the implements

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421. Only exceptionally, in case the man is ill and cannot walk, does Aspinall's:270 assertion hold: "In leaving the canoe, the woman must first carry the man ashore. He carefully holds the firebrand, protected between sticks of wood, above water, and begins first of all to erect a primitive hut." As a rule, however, the landing proceeds as described above and, for example, as is described in La Nature:274.

along with all the provisions onto the shore. One of the children carries a glowing stick of wood to the place that the father has pointed out to the child as the chosen campsite. The girls usually do this. The adults make sure that the last sparks of the fire in the canoe have been extinguished. Meanwhile the Indian woman remains seated in her canoe and keeps it on the same spot by paddling. When everything has been unloaded, she still has to moor it. If the landing place is suitable, a layer of Macrocystis

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502 algae, a hand's breadth high, is brought together; it is about as long as the keel of the vessel and about 60 centimeters wide. It is strewn on the shingle high above the highest water-line at flood tide. From this point to the canoe in the water the larger stones are removed and short sticks or several bunches of algae are placed crosswise. Then the husband and wife, helped by the children, drag the canoe along this foundation up to the highest point (422). It slides easily because the sticks are damp and

422. Despard (b):697 says: "Much care is taken when a canoe is drawn up on the beach for a short time. A dray-way is made by first removing every stone, and then a deep layer of fresh and wet kelp is laid down, and the canoe carefully drawn up on this by a couple of hands" /cited in English/.

because the bunches of algae chosen are still fresh and covered with slime. The canoe remains tipped sideways until, at the next departure, it is pushed into the water over the same slide-way (p. 134).

While the woman, as we have just said, constantly keeps the canoe near the landing place by proper paddling, the man and the children disembark, and with combined efforts they place the individual implements and the booty from hunting on the shore. When everything has been unloaded, the woman steers toward the middle of the channel if she wants to moor the canoe there. Meanwhile, following a popular custom, she calls to the members of her family on the shore, repeating an ancient phrase:

ɛ̄ker	ilā̄na	hā̄in	kā̄ja
the hut	to build	now	quickly!

This is a request to them to set up the dwelling quickly.

If the landing place lacks sufficient room and a sheltered spot for the canoe, the Indian woman uses another expedient. After everything has been unpacked, she rows alone to the center of the channel where thick bunches of Macrocystis algae are floating. About 100 meters from this coast she ties her vessel to

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502 the tough algae stalks and also pulls bundles of branches across it so that it is all entangled in the elastic bundle. She also fastens the paddle there. Then she dives out and swims to shore. Meanwhile her family has kindled a good fire, and she soon warms herself thoroughly (423). No matter how high the waves pile up

423. Bridges (MM:III, 115;1869) also discusses this method of mooring the canoe.

during the night, they do not hurt the light canoe. On the beach it could be dashed against rocks at high tide /617/ or tossed back and forth on the shore, which would scrape open the seams. Hence it is moored safely outside among the floating elastic algae which are in tangled masses (424).

424. Lucy:170 has erroneously maintained that the canoe is taken apart on landing. Anyone who is familiar with the construction of this vessel knows that taking it apart is impossible.

481 On this occasion, which happens frequently, the Indian woman is obliged to swim. It is a strange fact that generally only women and girls can swim. Many European observers have pointed this out (425) and praised their endurance in diving. Bridges (MM:III,

425. For example, Bridges (MM:XIII, 157; 1879), Despard (b):697, Hyades (h):12 and (q):213, Lovisato (b):130, Spegazzini (a): 171, and others.

115; 1869) briefly emphasizes: "Women invariably swim, and men never" /cited in English/. Only when they are forced by necessity, however, do they enter the water, namely, when servicing the canoe, when looking for sea urchins, and when they haul in a game animal. On the really warm days which are extremely rare a few persons bathe in order to cool off a bit (426).

426. Hyades (g):38 emphasizes: "Strangely

/617 cont./

481 Hyades (h):12. This answer does not need an explanation.

Everyone knows that in an accident some man or other could perhaps have been saved by swimming, as many women succeeded in doing; nevertheless, he does not make any effort to learn this art.

481 The manner in which the women move in the water resem-
868 bles our so-called paddle-stroke, or, as Martial:193, agreeing with Fitz-Roy (a):186, expresses himself, "is more like that of the dog than ours" /translated from French/. The mother teaches her daughter when she is still young. In a shallow inlet she rows her away from the shore, squats in the middle of the canoe, extends her outstretched arms over the upper edge and requests /618/ the girl to lie down on top of them, face downward; suddenly she draws her arms back and calls briefly: "Now swim!" The girl must now help herself until she has learned this art. Except for a few words of explanation, she receives no instruction. Sometimes during these exercises the mother places a flat stone on the girl's back.

•502 In their frail vessel the natives feel completely safe. And why not! Their accurate judgment of the weather situation makes it possible for them to know what they may risk, and they show great skill in handling their canoe. Formerly it was very seldom indeed that a boat capsized (430). If in most recent times such

430. In this connection Spears:55 says: "Both the Rev. Thomas Bridges and the Rev. John Lawrence told me that they never heard of a Yahgan being upset in his canoe until these later years" /cited in English/.

accidents have happened repeatedly -- I myself was once a witness to one -- it can be proved that the man or the woman, usually both, were intoxicated and yet ventured upon the water, even at night.

The European is seized with a strange feeling when he rides in the canoe because it is extraordinarily light and unsteady and stands high in the water. The slightest movement of an occupant

/618 cont./

502 causes it to rock, and this makes the uninitiated feel very insecure. Several times (p. 129) I rode in a true bark canoe and never dared to move. In it one is in a state of precarious balance, and the higher the center of gravity of the vessel and the less firmly one can brace himself, the more sensitive he is to every movement. Stirling described his experience in March, 1864: "A person accustomed to the firm seat of a boat is likely to feel a nervous sensation in these frail barks. The squatting position helps on the sensation a little" /cited in English/ (VSA:XI, 238; 1864).

502 Since the boat trips are unavoidably necessary for Yamana economic life and since they occupy more or less half the year, we can appreciate the active participation of the woman. Despard (b):696 proves this emphatically: "Women do the paddling; they also have entire charge of the canoe, when once made; it is to the Fireland woman what the house is to her civilized sister, her chief place of employment" /cited in English/. The canoe is, so to speak, the center of her entire day's work, and no matter how much she likes to be in her hut temporarily, she nevertheless feels most comfortable in her boat. If 502 the journey is to continue in the morning, the entire family helps her drag it from the landing place into the water. If it was moored out in the channel, she must swim out, no matter how cold the tide. She climbs in, loosens the strong algae stems, and rows to shore. Here all the implements and possessions are loaded up again, and glowing wood embers are placed in the center for a low fire. After all the persons and dogs have boarded, /619/ the Indian woman steers her vessel toward the goal agreed upon. She is able to paddle for many hours without becoming overtired, for she takes advantage of the propelling force of the waves and air currents as much as possible. The bark canoe is extremely easy to move, and constant occupation with it becomes a sort of game (431).

431. Phillips (a):1011 is the only one who mentions the following general observation: "If one invited a fellow for a pleasure trip in a rowboat and gave him the oars, he

/619 cont./

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kept at it for hours and would not be fatigued. In fact, in all kinds of sailor's work the Fuegians show an uncommon skill, and this occupation obviously affords them entertainment."

It would be unjust to dispute the fact that the Yamana are daring seafarers. It takes great courage and presence of mind to set out in the light, unsteady bark boat with the waves high and with the rapid weather changes of their country, feared even by European seamen (432). In spite of this, they have pushed forward

432. These daring canoeists were marveled at by many Europeans. Lovisato (b):135 wrote: "With these poor boats they do not fear the disastrous hazards on high seas" /translated from Italian/. Other opinions are even more laudatory of the Yamana.

as far as the Islas de Ildefonso, as Bridges (k):233 assures us. One can see these islands distinctly from Seno Año Nuevo in clear weather. We cannot accuse them of cowardice, with Pickering: 19, because they have not visited the Falkland Islands, for these lie far beyond their field of vision. On the open sea there are almost no game animals; why, then, venture out so far? It is only when a sick or dead whale is floating in the waves that many canoes go far from shore, if there is the slightest hope that they can reach it. Near the outlying islands and in the inner channels the Indian family finds all higher and lower animals needed for their subsistence. They are obliged to go after them almost every day. Hence we are fully justified in calling the Yamana genuine water nomads.

Despite all their skill and precaution, occasionally a family would lose their canoe when they looked for eggs or cormorants on a low island without being able to moor their vessel securely beforehand. Usually they had no choice but to summon strangers [202] with smoke signals. Hyades was right when he said (g):38: "The loss of their canoe renders a Fuegian family completely helpless

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• 582 for the moment, and if they are shipwrecked on a lonely rock and do not happen to be noticed by others, they are in danger of starving to death." Such rare accidents, however, do not in the least weaken the brilliant record of the seamanship of the Indian women.

3. On Land

361 461 We are justified in saying that the Fuegian's principal field of action is the sea, for on land he makes only a temporary brief halt here and there. He never settles anywhere for a long stay. /620/ Soon after landing, the man, aided by his wife and children, builds a simple, loosely constructed hut or only a meager protection against the weather and the rigors of the night. If adverse natural forces do not prevent it, the family usually travels on the next day or the day after. The sojourn on land is for rest and certain manual work. After the day's trip the woman, especially, needs adequate rest, but the man no less, for he is sometimes very agitated and active while hunting and does not feel his great exhaustion until later. Sometimes both husband and wife must exert all their skill for hours to combat headwinds and counter-currents until landing is possible. They expend all their strength doing this and need two or three days before they dare venture out to sea again. On shore, the man makes the tools he needs; however, in this occupation he is never tied down to a certain place. He works here and there on the same piece until it is finished, even though he has to load and unload it, unfinished, 20 times. Similarly, the woman performs all her manual work on land and combs the vicinity of the hut for mussels and snails, fungi and berries.

221 In its ceaseless criscross journeys, the family follows a certain plan dictated by the prospect of success in food-seeking. In general a family travels far more in summer than in winter, even though unfavorable weather is more predominant (p. 24 /untranslated/) (433). In summer they have a larger selection of animals

433. Without giving this as a reason, Bridges (VSA:XIII, 207;1866) simply says:

/675 cont./

462 [352] and offers him what he prefers. She roasts the larger pieces of meat in and beside the fire, bakes and cooks the fish and mussels, crabs, and birds' eggs in hot ashes. She also provides drinking water and fetches it herself if none of her daughters is free to do it. Everyone expects her to make the small pieces of jewelry, such as necklaces and anklets.

462 356 /676/ Her field of work is the hut. She takes part, together with her husband, even in its construction and repairs damaged places and sections that have been loosened by the wind. She devotes particular attention to the hut fire, guarding it day and night, regulating the radiation of heat and the mounting flames, and seeing to it that the draft comes from the right direction and the smoke quickly drawn off. It is hard to believe how much attention and what numerous manipulations the hut fire demands if it is to benefit every member of the family and not annoy anyone. She prepares the sleeping place for everyone just as he wants it, and from time to time she renews the pallet. A good deal of refuse accumulates in the small living quarters, and the woman sees to it that this is promptly removed. She performs her many manual labors in the hut and in front of it, and she devotes herself tirelessly to the care of her children.

462 ● 502 Her second field of activity is the canoe. It is the man's task to build it, but thereafter the care of this important means of transportation is entirely in her hands. She demands that the man make the repairs needed in the course of time, but she alone manages the canoe on the water and guards it on the beach (p.134). Before the family embarks, she gets the canoe ready so that everyone can comfortably pile in his things and easily climb in. She alone takes care of the paddling, which combines rowing and steering, and that is why she regularly takes her place at the stern end. She has previously come to an agreement with her husband as to the destination and the course. He gives her specific directions when he is on the trail of game. She anxiously guards the fire so that there is no danger to the bottom of the canoe, and she trains her children to keep it gently burning. To avoid capsizing, she sees to it that the occupants distribute themselves properly and that heavy pieces of game do not disturb the balance. She is always very conscious of the fact that on the water she alone is responsible for the boat and for her entire family.

3: Lothrop E-5 (1924-1925) 1928
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PADDLES

The old-fashioned paddle (*kpi*) had a long pointed blade and a short rounded handle (fig. 75). The blade was diamond-shape in

FIG. 75.—Yahgan paddle. (After Hyades and Deniker.)

section, so there was a tent-like ridge centrally down each side. Today most of the blades have rounded tips, a shape which the Yahgan may well have adopted from the Alacaluf.

The women, who were the paddlers, often joined their men folk in fighting, using their paddles with deadly effect.

MOORING ROPES

Canoes were moored either with a seal-skin thong (*uwerak*) as shown in fig. 76, or more commonly with a braided grass rope (*shakawel*) such as is seen in fig. 77. The process of braiding the rope is illustrated in fig. 56.

FIG. 76.—Yahgan seal-hide thong. Diameter of coil, 8 in. (16/2547)

CANOE BAILER

As all the Yahgan canoes leaked more or less, some kind of a bailer was imperative to keep them afloat. For this purpose a bark bucket like the water-bucket, but not so tall, normally was used (fig. 78). The writer has seen small seal-skin buckets said to have been used for this purpose.

CARE AND MANAGEMENT OF THE CANOE

The canoe was paddled by the women, who sat in the stern, while the men crouched in the bow to cast the spears. When paddling, owing to the short handle, one hand was under water.

3: Lothrop E-5 (1924-1925) 1928
SH6 Yahgan SH6

FIG. 77.—Yahgan grass rope. Diameter of coil, 3½ in. (16/2349)

As a result of the exercise, the women were very strongly developed above the waist, but poorly developed in the legs.

When it was desired to make a landing the canoe was paddled in to the beach, bow-on, and the man of the family and the children stepped ashore. The wife then paddled the canoe out to a piece of kelp, moored it, and swam ashore. As a result all the women were able to swim, while few of the men could do so.

The canoe was kept in the water habitually, because hauling it up on the beach was difficult owing to the fragility of the bark. When it was necessary to make repairs, the beach was carpeted with wet kelp to make a soft and slippery surface over which the canoe could be dragged with ease. The dugout canoes, however, were a different proposition, so for them runways were made by removing the stones (pl. xi). Stakes were driven at the head of the runways to which the canoes were tied. Canoes used habitually since the invention of the dugout may be distinguished by the presence of such runways.

FIG. 78.—Yahgan bark holder. (After Hyades and Deniker.)

WEAPONS AND METHODS OF HUNTING

SPEARS

Yahgan weapons were the spear, club, sling, and bow. In their fashion of living, spears were almost an impera-